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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/723,615	11/27/2000	Jack Cheng	GRQ-00100	8414
28960	7590	09/22/2004	EXAMINER	
HAVERSTOCK & OWENS LLP 162 NORTH WOLFE ROAD SUNNYVALE, CA 94086			BUDD, MARK OSBORNE	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PVA

Office Action Summary	Application No.	Applicant(s)	
	09/723,615	CHENG ET AL.	
	Examiner	Art Unit	
	Mark Budd	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 23 July 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-46,49-53 and 132-144 is/are pending in the application.

4a) Of the above claim(s) 5-13,15,18-46,49-53 and 132-142 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-4,14,16,17,143 AND 144 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

Claims 1-4 and 143 are rejected under 35 USC 102 as anticipated by Endo, Culp, Assard, Euseman or Funakubo for the specific reasons set forth in the previous office action (3-18-04).

Claim 144 is rejected under 35 USC 112 as being indefinite for the reasons noted in the previous office action.

Claim 144 (as understood) is rejected under 35 USC 102 as being anticipated by Culp, Assard or Eusemann, for the reasons set forth in the previous office action.

Claims 14, 15 and 17 are rejected under 35 USC 103 as being unpatentable over Culp Endo or Assard in view of Kamigaito for the specific reasons noted in the previous office action.

Applicant argues differences between the applied prior art and applicant's inventive concepts, but the claims do not reflect any differences. For example, applicant argues that Endo and Funakubo fail to teach contact pads in the anti-nodal regions. However, no contact "pads" nodes or anti-nodes are claimed in e.g. claims 1-4. Applicant also argues that Culp, Assard, Euseman and Funakubo do not teach exciting the piezoelectric element in resonance thereby causing standing waves....". However, the claims do not specify resonant operation. Applicant argues the references don't teach reducing static friction. However, each reference teaches before operation that a first and a second surface are in static contact. Once in operation, the surfaces are moveable relative to each other, thus the static friction has been broken and the friction coefficient has been changed.

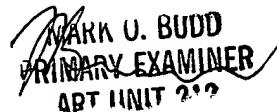
Applicant states the rejection of claim 144 under 35 USC 112 is improper because "claim 144 teaches placing the first surface at an appropriate distance from the first element. Therefore, no motion from the first element will be or can be imparted perpendicular to the second surface". However, claim 144 clearly and specifically requires the first and second surfaces are in slidable contact with one another along an interface----". Thus, according to claim 144, the appropriate distance must be zero and any motion due to the positions effect would be imparted to the second surface.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Budd/ds

09/14/04


MARK U. BUDD
PRIMARY EXAMINER
ART UNIT 2834